

## ABSTRACT

To provide a switching system with telephone switching function mainly on the basis of hardware processing by using  
5 isochronous channel which is a real time communication channel. The switching system comprises a gateway node connected with ISDN (Integrated Services Digital Network) and PSTN (Public Switched Telephone Network), and one or more extension nodes, and a serial bus such as IEEE 1394  
10 bus. The gateway node transforms data rate of outside line into data rate of extension node, and the other way around, and secure a seamless communication channel. Concretely, the gateway node secures an isochronous channel, according to a request from the extension nodes or the outside line, and  
15 executes switching such as transfer or reservation. A resource manager holds a table for managing the gateway node and extension node.